

FINAL REPORT

ECRF APPLIED RESEARCH CENTER

19970205

October 2000

Prepared by: East Central Research Foundation



Canada¹

Saskatchewan

Agri-Food Innovation Fund

"ECRF Applied Research Centre"

Project # 97000205

FINAL REPORT

Summary:

The ECRF focuses on applied research and demonstration of specialty crops. Many of our projects are producer driven and more work with conventional crops is being done. Through AFIF funding we were able to purchase seeders, sprayers, soil punches, scales, weigh wagons, harrows, cultivators, mowers, tractors, and combines which have given the ECRF opportunities to successfully provide services and plot sized research data to the research communities, agricultural industry and producers. Laptop computers and digital cameras have enhanced our extension activities. This equipment has allowed us to address our research needs enormously in East Central Saskatchewan and instil sustainable production practices in this ecoregion.

Technical Report:

Background and Objectives:

To provide a complete agronomy package to producers, researchers and Agricultural industry regarding specialty and conventional crops. To research issues that need to be addressed for crops in the East Central Region. In order to conduct valid and informative data research facilities and equipment were needed to establish and maintain quality field research.

Performance Indicators:

Successful Equipment Purchases (Identification of facilities, equipment problems and performance summary):

1. 27h PTO Tractor- very satisfied; used for sprayer, harrows, cone seeder and soil punch
2. Tour Wagon - very satisfied; used for all crop tours at spoke farm to take producers from one test to another
3. 12' Seedhawk Plot Seeder - very satisfied; used for establishment of research plots and used on a regular basis. Also used for broadcasting fertilizer, granular chemical and inoculant
4. 4' Cone Delivery Plot Seeder - very satisfied; same as #3
5. 3 pt. Hitch sprayer (30' booms) - very satisfied; used on plots and on large farm fill acres
6. Wintersteiger plot combine - very satisfied; used for all plot harvesting
7. Weigh Wagon - Good; used to weigh grain samples during harvest and auger into bins
8. (2) 1520 bu Hopper Bins (one with aeration) - Satisfied; stores grain from farm fill acres
9. (4) 55 bu Hopper Bins - very satisfied; contains all of our fertilizer requirements during seeding and stores seed until marketed

10. Self-propelled and Pull Type Swather - very satisfied; allows us to do our own work without custom work being hired out
11. Harrow Section - very satisfied; used on research plots
12. Infrared Drying room facility in new building - very satisfied; are now able to dry plant and soil samples to complete research
13. Soil Punch - Very satisfied; mandatory for calculating nutrient requirements for crops
14. Weather Station - Very satisfied; mandatory for research to factor in weather variables
15. (3) Scales [60 kg, 5 kg and 1 kg] - very satisfied; allows us to measure 1000 kwts., calibrate equipment and weigh grain samples for research
16. Digital Camera - very satisfied; enhances our extension activities

Information on # of clients served and extent of use of new equipment and facilities:

All research conducted with infrastructure equipment has served over 8100 producers in the East Central Region via providing information on specialty and conventional crop research and demonstration and instilling sustainable farming practices.

Results are promoted via newsletters, brochures, seminars, workshops, conferences, website, ADD Board and Rate Payer Meetings, and is shared among industry leaders and government agrologists. AFIF is acknowledged at each presentation. Extensive use of coverall shelter and new 80 X 40 building (with drying room facilities) is used for equipment, seed, fertilizer, inoculant and chemical storage. As well as a resource center where producers can come to access information. Drying room facilities are used extensively for drying plant and soil samples. Office space is included for staff to collect and analyze results for report writing. Researchers and agri-food industry workers can access information or visit to initiate projects in the coming year.

Equipments Impact on the Saskatchewan Agri-Food Industry:

Allows Agri-food Industry (chemical companies, elevators, agencies such as SSCA, DU, etc.) to set up research or demonstration where equipment is not available to them. We are a central location drawing business from 4 ADD board districts and can be used to establish applied research projects in this region.

Equipment s Impact on other research programs:

Saskatchewan Forage Council, Sk. Pulse Growers Association, Sk. Hemp Association, Canola development commission, Sk. Ag and Food, SK. Flax council, Winter Cereals Canada, SSCA, Manitoba Agriculture and Agri-Food, Indian Head Agricultural Research Farm, Ben Don Innovations Engineering/Research Company and the University of Saskatchewan can set up projects that are applied for the east central region in addition to other locations in the province to understand the agronomy surrounding these crops of interest.

"ECRF Applied Research Centre" – FINAL report – page 3

Append Data collected, analysis of data and derived conclusions:

- Fertilizer response in spices
- Organic Weed Demonstration
- Regional Adaptation of Pulse Crops
- Foliar Disease Management in Pea, Lentil, and Chickpea
- Regional Testing of dry bean and advanced test
- Time of Weed Removal in Field Pea
- Regional Variety Trial in Sunflower
- Low vs. High Disturbance seeding of specialty crops
- Minor Use Registration of Herbicides
- Recropping field pea on land treated with Curtail M
- Underseeding Alfalfa to Pursuit Smart Canola
- Barley seeded with granular fertilizer vs. Pig Manure
- Organic Oat Production
- Seeding Dates, Rates and Fertility Rates in Oat Varieties
- Agrotain on Canola
- Different Rates of Phosphate Side Banded and Seed Placed with Field Pea
- Demonstration Trials for Cyanamid, Dow Agro Sciences, Monsanto, Gustafson, and Canadian Wheat Board
- Fall Canola Agronomy Trials
- Winter Wheat Agronomy Trials
- Corn Variety Trials (conventional seeding and precision seeding)
- Swath Grazing Trial with Corn and Barley
- Bean Variety and Fertility Trials
- Forage, Flax and Pulse Variety Trials

Serials Numbers:

60 kg Scale - 5014528-RZ

5 kg Scale -

1 kg Scale - 71205554

Balance Scale

Weigh Wagon - 18579

Wintersteiger - 140098117931

Rogers Sprayer - 106

30' Sprayer - 0692234

4300 Tractor - LV 4300H230298

SeedHawk Air Seeder - 971140

Mower - 9793287

Soil Punch - 96450

25' Swather - 009308
14.5' Swather - 13100C003771
Cone Seeder – FAF1192
Trailer -

Innovation Fund Acknowledgment:

Newspaper:

- ◆ July 22/99 - Western Producer - "Research center to share results of crop experiments"
- ◆ July 22/99 - Yorkton This Week and Marketplace - "Tour Advertisement"
- ◆ August 18/99 - Canora Courier - "About 160 producers participated at annual crop tour in Canora"
- ◆ Fall - SSCA Prairie Steward - "High vs. Low Disturbance Seeding Trials"
- ◆ Fall - SSCA Prairie Steward - "Alfalfa and Smart Canola Trials"
- ◆ February 2000 - SAF District Extension News "Fertilizer and Innoculant in Field Pea"
- ◆ March 28/00 - Cattlemen's Corner Magazine - "Growing Corn for Forage Value"
- ◆ April 5/00 - Canora Courier - "ECRF farm is expanding"

Newsletters:

- ◆ Spring 1999 - ECRF Annual Newsletter
- ◆ Fall 1999 - Town of Canora Newsletter
- ◆ Spring 2000 - ECRF Annual Newsletter
- ◆ March 2000 - The RM of Garry Newsletter - "Amazing Graze and Canamaize Corn Fertility Project at ECRF"
- ◆ May 31/00 - IHARF Newsletter

T.V. (BBS - Eye on Saskatchewan):

- ◆ July 20/99 - Tour Advertisement
- ◆ October 26/99 - Winter Extension Activities
- ◆ February 14/00 - ECRF and SAF Winter Seminar Series at Yorkton Agriplex

Tours:

- ◆ July 13/99 - District #19 ADD Board Tour
- ◆ July 16/99 - SAF Agrologists Tour
- ◆ July 22/99 - District #42 ADD Board Tour
- ◆ July 28/99 - ECRF Annual Crop Tour
- ◆ May 26/00 - Preeceville Teachers Association Tour
- ◆ July 24/00 – Chinese Delegation Tour (Embassy Officials)
- ◆ July 27/00 – ECRF Annual Crop Tour
- ◆ August 22/00 – SK. Institute of Agrologists Tour

Trade Shows:

- ◆ April 23-25/99 - Canora and District Trade Show - Canora
- ◆ January 2000 - Crop Production Show - Saskatoon
- ◆ February 10/00 - SSCA Annual Convention and Trade Show
- ◆ February 15/00 - Sk. Pulse Growers Trade Show in Canora

Meetings and Conferences:

- ◆ June 9 /99 - SAF Regional Meeting at Spirtwood Acres
- ◆ July 14/99 - Herb and Spice workshop for communities in Bloom weed in Canora at the Parkland Regional College
- ◆ November 2/99 - Town of Canora Town Council Meeting on ECRF Farm (Canora)
- ◆ November 19/99 - Rate Payers Meeting RM #271 at Kamsack
- ◆ November 22/99 - District #19 ADD Board at Council Chambers in Canora
- ◆ December 1/99 - Canora Seed Cleaning Plant Annual Meeting at Canora Golf Course (producers and owners)
- ◆ January 14/00 - SK. Herb and Spice Annual Conference (Saskatoon)
- ◆ February 7/00 - District #18 ADD Board Meeting (Kamsack, SK) ECRF Update
- ◆ February 10/00 - SSCA Direct Seeding Conference (Regina) ECRF Update
- ◆ February 14/00 - Preeceville Rate Payers Meeting (Preeceville, SK)
- ◆ February 15/00 - SK. Pulse Growers Association 2000 meeting (Canora Community Center)
- ◆ February 24/00 - ECRF and SAF Winter Seminar Series (Yorkton Agriplex)
- ◆ February 29/00 - Duval, SK Crop Production Update and ECRF research results
- ◆ March 2/00 - Young, SK. Crop Production Update and ECRF research results
- ◆ March 10/00 - Interagency Meeting (DU, Winter Cereals Canada, SSCA, PRFA, SAF, and Yorkton Tribal Council) ECRF Update
- ◆ March 16/00 - Rama, SK Agronomic Information Seminar (Rama, SK)